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## North Crater Nature Trail 2 1990 **United States** Pacific Northwest Nation Pacific Northwest National PREP. Department of Agriculture

## NORTH CRATER NATURE TRAIL



Follow the numbered posts around this 3/4 mile trail for a self-guided tour of Diamond Lake's wildflowers. Use the guide in this pamphlet to identify individual plants.

POST#1 — The presence (or absence) of water at Diamond Lake is a key factor determining what plants grow where. Close to this small intermittent spring are some typical moisture-seeking plants such as BLUEBELLS, VIOLETS, WILD SWEET PEAS and COW PARSNIPS.

POST#2—Leaving the more stable water source behind, hardier plants of LOUSEWORT, DESERT PARSLEY and PRINCE'S PINE are found.

POST#3—LODGEPOLE PINE, MOUNTAIN HEMLOCK, WHITE FIR and SHASTA RED FIR withstand the long snowy winters and short dry summers common to Diamond Lake. LODGEPOLE PINE has needles in bundles of two. MOUNTAIN HEMLOCK is distinguished by its feathery needles and drooping top. The stiff SHASTA RED FIR—needles, with a small crook where the needle attaches to the stem, resemble a tiny hockey stick. Young WHITE FIR bark generally is silvery white; needles are 2 to 4 inches long.

**POST #4** — The disturbed soil of a buried waterline reveals the pumice soil typical of the Diamond Lake area. This soil, freedraining and relatively sterile, provides **LODGEPOLE PINE** seedlings an easy toehold; the numerous seedlings help reduce erosion. Small purple **PRAIRIE LUPINE** and other plants that can withstand the dry conditions have begun to revegetate the corridor.

**POST #5** — Although the process is slow, the forest is in a constant state of change. Seedlings sprout from seeds produced by the mature trees and get their nutrients from the soil. Ants, insect larva, worms, fungi, and bacteria digest and break down the dead trees and other plant materials, enhancing soil fertility.

POST #6 — Porcupine Creek, with its year-round water flow, creates a stable aquatic community in the midst of the dry pumice forest. The moss provides shelter and food for numerous small animals. BOG ORCHIDS, GROUNDSEL, BLUE BELLS, VIOLETS, CONE FLOWERS and other water-loving plants abound.

POST #7 — The forest is also home to many furred and feathered creatures. POCKET GOPHERS reveal their presence with raised tunnel-like ridges; the BELDING GROUND SQUIRREL digs new entrances to an underground home. Small birds common to Diamond Lake are JUNCOS, MOUNTAIN CHICKADEES and ROBINS. Larger birds such as OSPREY and BALD EAGLES fly overhead. GRAY JAYS float silently from tree to tree and swoop down to snatch crumbs from the unwary picnicker. WOODPECKERS tap on tree trunks in search of insects and grubs which live under the bark.

POST #8 — The grassy meadow hosts flowering plants such as ORANGE MOUNTAIN DANDELION, GREEN'S GOLDENWEED and ELEGANT CAT'S EARS. VIOLETS bloom as the snow banks melt and LEAFY ASTERS begin flowering around mid-August.

**POST #9** — The black and charcoal burn spots are evidence of attempts to control mountain pinebeetle infestations. Insectattacked **LODGEPOLE PINE** was cut and removed and all slash burned to kill any remaining larva. The selective cutting of **LODGE-POLE PINE** extended the finger meadows of this area and helped to control the damaging insect.

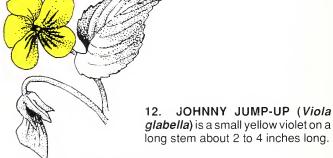
POST #10 — Once again the trail crosses Porcupine Creek. This spot offers a cross-section of plants common to Diamond Lake. Beginning at the road's edge in the dry pumice soil are small PRAIRIE LUPINE, LOUSEWORT and INDIAN PAINTBRUSH. Closer to the creek, the plants are thicker and include LEAFY ASTER, ELEGANT CAT'S EAR, and more grasses. Along the creek edges, CONE FLOWERS, MONKEY FLOWERS, BOG ORCHIDS and other plants abound.



Individual plants along the trail are identified with small garden stakes numbered according to the list below:

- 1. YARROW (*Achillea millefolium*) is a white lacy flat flower. The feathery leaves have a clean menthol smell when crushed.
- WILD STRAWBERRY (Fragaria virginiana variety platypetala) looks like garden strawberry plants except it is much smalier.
- 3. PAINTBRUSH (Castilleja miniata) has bright orange-toreddish tips and narrow leaves along stem.

- 4. WAX CURRANT (*Ribes cereum*) is a common bush in the Diamond Lake area. Leaves feel sticky; fruits are orange with fuzzy appearance. They are edible but bland and full of seeds.
- 5. WILLOW HERB (*Epilobium minutum*) is a small, white, easily overlooked flower; it is generally gone by the end of August.
- 6. The flower of VARIED-LEAF PHACELIA (*Phacelia hetero-phylla*) appears bristly and is generally purplish or white, with two or more flowers per plant.
- 7. LODGEPOLE PINE (*Pinus contorta*) is the common twoneedled evergreen in the Diamond Lake area.
- 8. RYDBERG'S PENSTEMON (*Penstemon rydbergii variety varians*) has pretty bluish-purple flowers on a reddish or dark green stem; generally grows in clumps.
- 9. MICROSTERIS (*Microsteris gracilis variety gracilis*) has tall stems with oblong leaves that appear hairy and may be sticky. Flowers are pinkish with yellow inside.
- **10. SIERRA PEA (Lathyrus nevadensis)** looks like a fragile garden sweet pea. Flower is generally light pink, fading to dull purple as flower ages.
- **11. THICK-LEAVED PEA** (*Lathyrus lanszwertii*) is similar to Sierra pea but leaves are wider.



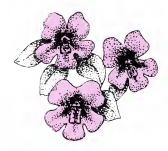
- 13. BLUE VIOLET (*Viola adunca*) is a small purple violet generally growing close to the ground in moist shady areas. Flowers may be hidden by the plant's leaves.
- **14. ELEGANT CAT'S EAR (***Calochortus elegans***)** has a small white flower on single stem with single leaf. Inside of the flower appears fuzzy.
- **15. BLUE BELLS or TALL LUNGWORT** (*Mertensia paniculata*) are mostly stem and leaves with small downward-hanging blue flowers at the ends. Generally clumped together in moist areas.

- **16.** COW PARSNIP (*Heracieum lanatum*) has fuzzy maple-like leaves. Plant grows quite large (8-15") before large white flowerettes appear.
- 17. WHORTLEBERRY or SMALL-LEAVED HUCKLEBERRY (*Vaccinium scoparium*) is a matted plant growing in clumps with broom-like branches and small, bright red berries. Similar to the thin-leaved huckleberry (# 27).
- 18. SMALL WINDFLOWER (Anemone Iyallii) is an early bloomer and looks like a small pinkish daisy but without the yellow center.
- **19. MOUNTAIN HEMLOCK** (*Tsuga mertensiana*) a coniferous tree usually found in high elevations or cooler exposures; characterized by its droopy top.
- **20. SPREADING PHLOX (***Phlox diffusa***)** has small four-petal, purplish-to-pink flowers generally in a group; low-growing, spreading plant.
- **21. LEAFY LOUSEWORT** (*Pedicularis racemosa*) is a fairly smooth-stalked plant with toothed leaves. The pinkish-to-white flowers are on individual stems blooming from the bottom up.
- **22. DESERT PARSLEY** (*Lomatium triternatum*) has feathery parsley-like leaves, with yellow flower heads.
- 23. WHITE-FLOWERED HAWKWEED (*Hieracium albiflorum*) is a tall, stalky quick-blooming plant with small, white, ray-like flowers.



- 24. ALICE'S FLEABANE (*Erigeron aliceae*) has tall showy, purple, daisy-like flowers.
- **25. PIPSISSEWA OR WESTERN PRINCE'S PINE (***Chimaphila umbellata***)** is a small evergreen plant generally growing beneath trees. Leaves are oblong and appear leathery. Flowers grow out of the top of the leaves on a stalk and are generally pinkish. After blooming, flower takes on dried appearance.
- **26. PINE LUPINE** (*Lupinus albicaulis*) has white pea-like flowers on a stem generally about 6" to 10" high.

- 27. THIN-LEAVED HUCKLEBERRY (Vaccinium membranaceum) At Diamond Lake, this short shrub is generally found with small-leaved huckleberry (#17). Fruits and leaves are larger than small-leaved huckleberry; fruits are reddish-purple ripening to dark purple.
- **28.** WHITE-VEINED PYROLA (*Pyrola picta*) has deep green leaves with grayish mottle along upper surface of main veins. The tall flower cluster has a wide range of colors.
- 29. BIG LEAF SANDWORT (*Arenaria macrophylla*) has willow-like leaves on 3 or 4 angled fuzzy stems. Small white flowers.
- **30. BAKER'S VIOLET** (*Viola nuttallii variety bakeri*) is a small, yellow violet growing close to the ground. Narrow lance-shaped, oblong leaves.
- **31. PRAIRIE LUPINE** (*Lupinus lepidus variety lobbii*) has purple flowers growing on a short central stalk. Generally grows in the drier, disturbed pumice soils around Diamond Lake.
- **32**. **TAWNY HORKELIA** (*Horkelia fusca*) A small lobe-petaled white flower with goldish fuzzy stem and low fern-like leaves.



- 33. DWARF PURPLE MONKEY FLOWER (Mimulus nanus) Tiny (one inch or less) purple or magenta-colored flower. From a distance, a mass of blooming monkey flowers tints the ground pink; generally gone by mid-July.
- **34. PINE MAT** (*Arctostaphylos nevadensis*) is also called "pine-mat manzanita"; has a thick mass of evergreen tongue-shaped leaves ending in sharp points. Stems fairly rigid. Related to kinnikinnick (bearberry) which has rounded leaves.
- **35. SWEET CICELY** (*Osmorhiza chilensis*) is a delicate plant whose large green leaves have toothed edges. The small white flower is easily overlooked.
- **36.** ARROW LEAF GROUNDSEL (*Senecio triangularis*) has large triangular-shaped leaves along tall stems, with small yellow ray flowers at top.

- **37. SLENDER BOG ORCHID** (*Habenaria saccata*) appears to be a bumpy green stalk. Close observation is needed to see the tiny orchid flowers on the stem.
- **38. LONG-STALK CLOVER (***Trifolium longipes***)** has standard three-leaf clover leaves with a "mophead" white flower on a long stalk; the flower fades to a rusty color as it ages.
- **39. MONKEY FLOWER (Mimulus guttatus)** has delicate yellow flowers, somewhat resembling tiny snapdragons, on a slender stem about 4" to 6".
- **40. ALPINE SPEEDWELL** (*Veronica wormskjoldii*) has blue flowers on slender stems. Leaves are oval and decrease in size as they go up stem.
- **41. CONE FLOWER** (*Rudbeckia occidentalis*) is a tall plant with broad leaves. The cone flower starts out as a small greenish-brown button which becomes longer as flower matures. Finally resembles a miniature pinecone perched on a green stalk.
- **42. BOG ST.JOHN'S WORT** (*Hypericum anagalloides*) has narrow oblong leaves and small yellow flowers. This is a smaller, creeping plant that has a tendency to form mats. Minute black dotting of leaves and perianth. Similar to #43.
- **43. WESTERN ST. JOHN'S WORT (***Hypericum formosum***)** A larger erect-stemmed plant with larger yellow flowers, similar to #42.
- **44. ALPINE MICROSERIS** (*Microseris alpestris*) Yellow, dandelion-like flower on thin erect stem. Slender, sword-like leaves with bracts.
- **45. WESTERN GROUNDSEL** (*Senecio integerrimus*) is a tall plant with oval leaves generally getting smaller as they go up the stem. Yellow ray flower with black-tip bracts beneath rays.
- **46. GREEN'S GOLDENWEED** (*Haplopappus greenei*) is a shrubby plant with narrow oval leaves. When the few flowers are present, they are greenish to yellow.
- **47. ORANGE MOUNTAIN DANDELION (***Agoseris aurantiaca***)** is a skinny (and more orange) version of the common well-known dandelion.
- **48. PUSSYPAWS** (*Spraguea umbellata*) are tight, low-growing clusters of soft grayish-pink round flowers.
- 49. ROSY EVERLASTING (Antennaria microcephala) has rosy-tinged fuzzy flowers with low-growing, hairy, grayish leaves.

- 50. BARESTEM BUCKWHEAT (*Eriogonum nudum* woody-stemmed plant with whitish or yellow hairy flowers
- 51. LEAFY ASTER (Aster foliaceus) has flowers that a similar to Alice's fleabane (#24) but are smaller; plant is st. Generally blooms mid-to-late August. Flower petals are r looking and bend "every which way".
- **52.** WHITE FIR (*Abies concolor*) Bark generally is silvery-Short needles. flat on bottom, blunt on ends.
- 53. SHASTA RED FIR (Abies magnifica, variety shaste have short needles that resemble tiny hockey sticks wi scoop end attached to the twig. The needles look like they a powdery white substance on both top and bottom.



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21 SEP 1990

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